## 11112574902

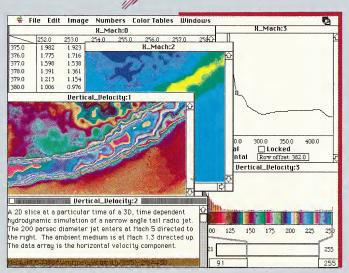
# SOFTWARE DESIGNED BY SCIENTISTS FOR SCIENTISTS

At Spyglass, our goal is to supply tools for the analysis, visualization, and management of scientific and engineering data. Our software is designed by researchers and engineers who use the Macintosh in their daily research.

Spyglass software and the Macintosh offer an alternative to expensive graphics workstations. We have replaced custom programming with convenient, easy to use, visualization and analysis applications.

Spyglass presents four powerful software programs that can be used independently or as a suite of tools:





Spyglass Transform is an interactive visual data analysis program for manipulating and visualizing arrays of floating point numbers. The data can be represented as a color image, as an interpolated image, as a polar image, or as a line graph.

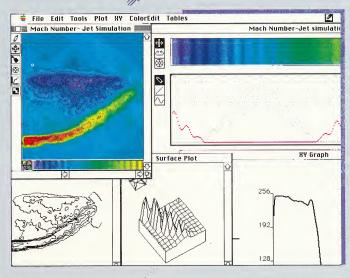
Select a part of the generated image, and see the corresponding data values. Select part of your data, and see the corresponding image region. Open many datasets, and see how they compare visually. Choose a color table, and change the appearance of the image. Enter analytic expressions in a notebook window, and derive new datasets based on transformations of your data. Use special

external functions for your analytic expressions, or write your own functions.

Spyglass Transform will save your dataset, your generated images, your comments, and your analytic expressions in a single HDF\* file. Data can be read into the program from HDF files generated on the Macintosh or other computers, through ASCII text files, or through the clipboard. Data and images can be exported from Spyglass Transform through HDF files or through the Macintosh clipboard.

Printing of data and of the images for all Spyglass software is supported by Laserwriters and color printers.





Spyglass View displays color images that represent data. You can interactively transform and edit the image color table, display the resulting image, and animate a series of images. Spyglass View gives you the ability to "squeeze" the maximum insight out of your images. By manipulating the color table, you can bring out features of your image that were not previously visible.

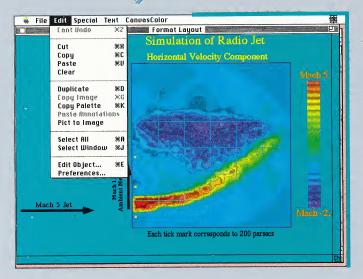
Within Spyglass View, images can be displayed as a color raster image, a surface plot, a contour plot, a dithered image, or as a series of cross-sections. The size of color raster images can be increased or decreased.

You also have the ability to manipulate Color Tables. You can compress and rotate the color table, drag and set colors in the table, perform histogram color adjustments, draw curves representing red-green-blue or hue-saturation-intensity, or even generate functions to represent color.

A powerful feature is the ability to generate animations. You can animate multiple images stored either in memory or on disk, step through single-frames of an animation, select any image in an animation, or cycle continually.

Getting images in and out of Spyglass View is easy. You can import and export images as HDF files, PICT files, or through the clipboard.





Spyglass Format produces presentation quality animations and layouts of color images. It is a tool to bring all your information together to convey a message.

You can position images, data, animations, and color tables in a layout format. Then, you can enter text annotations of any color, font, or size, add grid lines, tick marks, borders, import graphics from other programs, and select background colors to create a stunning presentation of your work.

clipboard. Layouts can be saved as PICT files or HDF files. You can display your layouts on the screen, create 35mm slides, or print them on a Laserwriter

or print them on a Laserwriter or a color printer. You can even generate an annotated animation of images.

Images and color tables can be

imported from HDF files, PICT

files, and from the clipboard.

Line graphics and text can be

imported from PICT files or the

#### AN EXPLANATION OF \*HDF

HDF stands for Hierarchical Data Format, a multi-object public domain file format designed to facilitate the transfer of graphical and floating point data between various computers and operating systems. The format allows you to store data objects of many different types such as floating point data, palettes, graphical images, and text notes in the same file. FORTRAN and Clibraries to read and write HDF files are available for a wide variety of computers directly from Spyglass or from the National Center of Supercomputing Applications at the University of Illinois at Urbana-Champaign.

#### **IMAGE CREDITS**

A three dimensional simulation of a radio jet entering an ambient medium at Mach 5. Dinshaw Balsara and Mike Norman, National Center for Supercomputing Applications, University of Illinois at Urbana-Champaign.

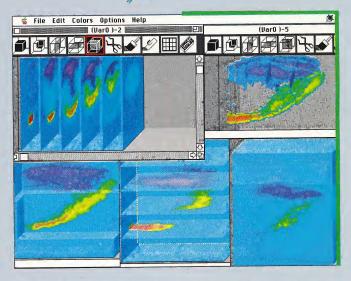
### **TRADEMARK ACKNOWLEDGEMENTS**

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#### SYSTEM CONFIGURATION

Macintosh II
256 color (8bit) display
1 meg memory (4 meg recommended)
hard disk required





Spyglass Dicer is a tool for interactive visualization of volumetric data. You can display your data as a color cube then "slice and dice" to visualize data inside the cube. Spyglass Dicer offers an unprecedented level of visual access to 3-Dimensional data.

After loading your three dimensional data, you can display a series of horizontal, vertical, or parallel slices of your data, position your slices interactively, display selected cubes of your data,

remove cubes from your data, select different color tables, and render some colors as transparent. You also have the ability to control shading of the data cube surfaces, load arbitrary color tables, and modify color tables.

Data can be brought into Spyglass Dicer as HDF files, ASCII text files, and arbitrary binary files. Images can be exported from Spyglass Dicer as HDF files, PICT files, and to the clipboard.

For more information, please call or write:

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